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Automated system of engine tests on the basis of bosch controllers

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Abstract

© Research India Publications. Solution of the design problem, development and future use of the automated test systems (ATS) of internal combustion engines (ICE) involves, first of all, the analysis of a number of important requirements for the development of technical, mathematical, software, information, linguistic, organization and methodological support of the automated system. Currently, the need for a widespread adoption and operation of the automated systems in actual test conditions of stations of manufacturers and engineering research institutions imposes certain restrictions on designing computer-aided design facilities, real test technologies of various types and modifications of internal combustion engines. This situation comes from a sufficiently large number of tested engines, aggregates and units of different modifications, and also the need for phase-by-phase error elimination in the existing algorithms, including when conducting research and development test of engines. Requirements of real engine behavior set conditions for constant improvement of engineering level of modifications and lead to the fact that the character of expenses for fulfillment of tests at designing new types of engines increases every time. These expenses become the highest in absence of interconnection of the levels of automation of production and research works. As a result of this, automation of technological processes of engine tests of internal combustion is one of the most important tasks of raising a technical level of production and quality of the produced engines.

Keywords

Controller, Diagnostics, Engine, Model, Programming, Tests